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U. S. DEPARTMENT OF AGRICULTURE

FOREST SERVICE

WILLIAM B. GREELEY, Forester

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# SALE PROSPECTUS

890,000,000 Board Feet  
National Forest Timber  
87 per cent Western Yellow Pine

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BEAR VALLEY UNIT  
MALHEUR NATIONAL FOREST  
OREGON



WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1922



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## **SALE PROSPECTUS—890,000,000 BOARD FEET NATIONAL FOREST TIMBER.**

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### **INTRODUCTION.**

It is the policy of the Forest Service to make the timber resources of the National Forests available for use and to have the sale of the timber aid in the development of the neighboring agricultural territory. In accordance with these policies the Service is now offering the opportunity to open up one of the finest large compact bodies of yellow-pine timber in the West. It offers a 20-year contract covering a body of timber estimated to cut 890,000,000 board feet, and further announces its intention to handle the remaining timber resource of the region so that there will be opportunity to continue the business indefinitely, through subsequent sales of National Forest stumpage. The establishment of this lumber manufacturing business, based on the contract now offered, will bring much-needed railroad transportation into a region of large possibilities for agricultural development.

The project is an unusual opportunity for establishing a new permanent unit of pine lumber production, to meet the demand caused by the rapid exhaustion of the pine timber in the Lake States and the South.

The pine timber on the south side of the Blue Mountain region, in east-central Oregon, has never been operated except in insignificant amounts for local use. Railroad development has stopped just short of the point where it would tap the timber and just short of opening up fertile irrigable valleys which offer promise of a large permanent traffic based on agriculture. Harney Valley, along the lower reaches of the Silvies River and north of Malheur and Harney Lakes, is a large area of nearly level, tillable land now awaiting railroad extension and the completion of an irrigation system for which bonds have been voted. A large scale lumbering operation, based on the National Forest timber to the north of the valley, will necessarily involve the construction of a railroad 30 miles in length traversing this valley. The time is ripe to bring about this development and to begin the use of the timber. Seldom, if ever again, will such a business opportunity in National Forest virgin pine timber be offered. The initial outlay for fixed investments will be large, but the business risk is minimized by the unusual features of the case.



*Sale Prospectus—Bear Valley Unit.*

General information covering the specific tract offered for sale, the proposed operation, and other pertinent factors are as follows:

**AREA, LOCATION AND ACCESSIBILITY.**

The tract comprises an area of about 67,400 acres lying at the headwaters of the Silvies River, in a broad basin known as Bear Valley, within the Malheur National Forest, Oregon. It is almost entirely between 4,500 and 6,000 feet above sea level.

From the standpoint of its natural and most feasible outlet the tract lies 50 miles north of the town of Burns and about 80 miles from Crane, the present terminus of a branch of the Union Pacific (Oregon Short Line Railroad). Crane is 127 miles from Ontario, Oreg., the junction point with the main artery of the Union Pacific System to Portland. Ontario is 434 miles by rail from Portland and 316 miles from Ogden, Utah. Burns, with a population of about 1,200, is the county seat and largest town in Harney County. Detailed information in regard to Harney Valley and surrounding territory is given in a later section of this prospectus.

**DESCRIPTION OF TIMBER.**

The total stand of National Forest timber offered for sale is estimated as follows:

	M. ft. b. m.	Per cent.
<b>Western yellow pine</b> .....	<b>770,000</b>	<b>87</b>
Douglas fir .....	78,000	9
Western larch .....	30,000	3
White fir .....	10,000	1
Lodgepole pine .....	2,000	---
	<hr/> 890,000	<hr/> 100

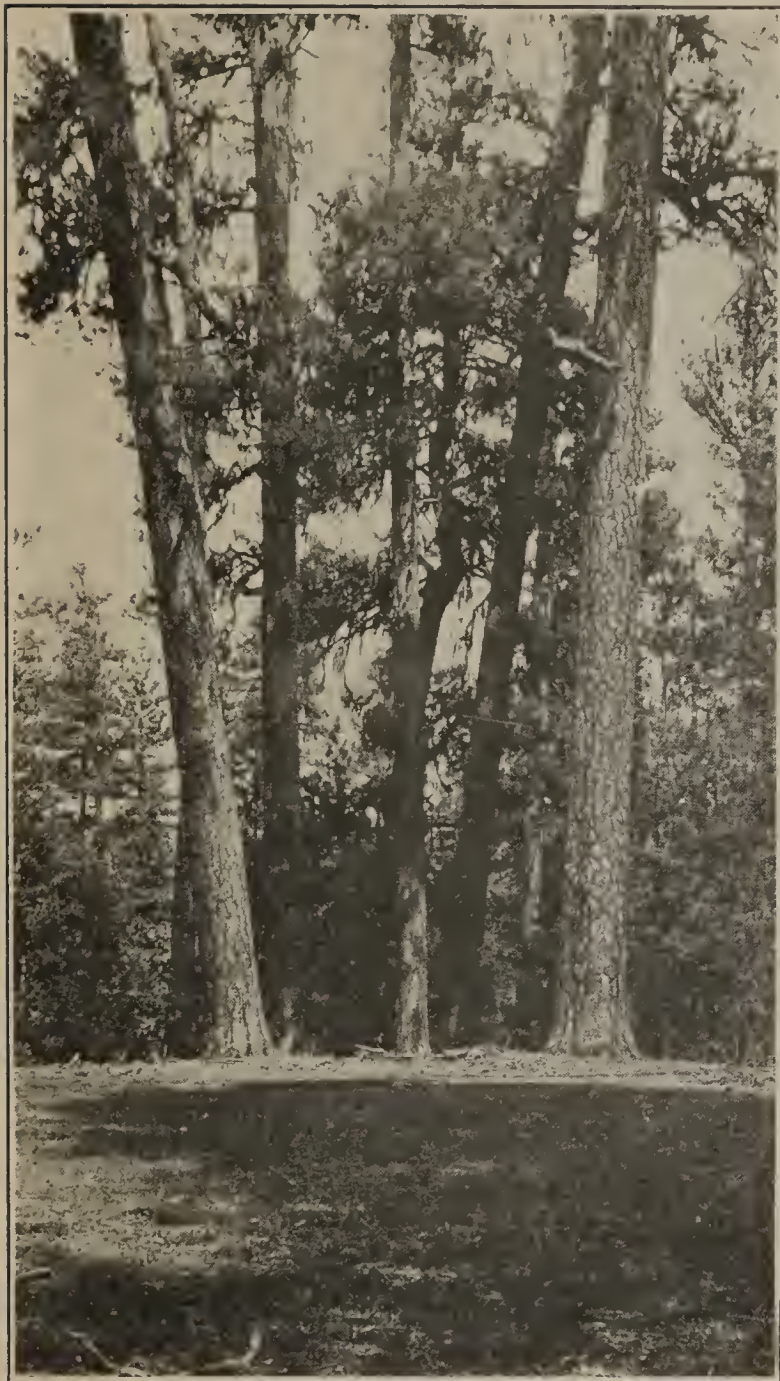
Average stand per acre, pine, 11,400 board feet; all species, 13,260 board feet.

The cutting of other species than yellow pine will be optional with the purchaser.

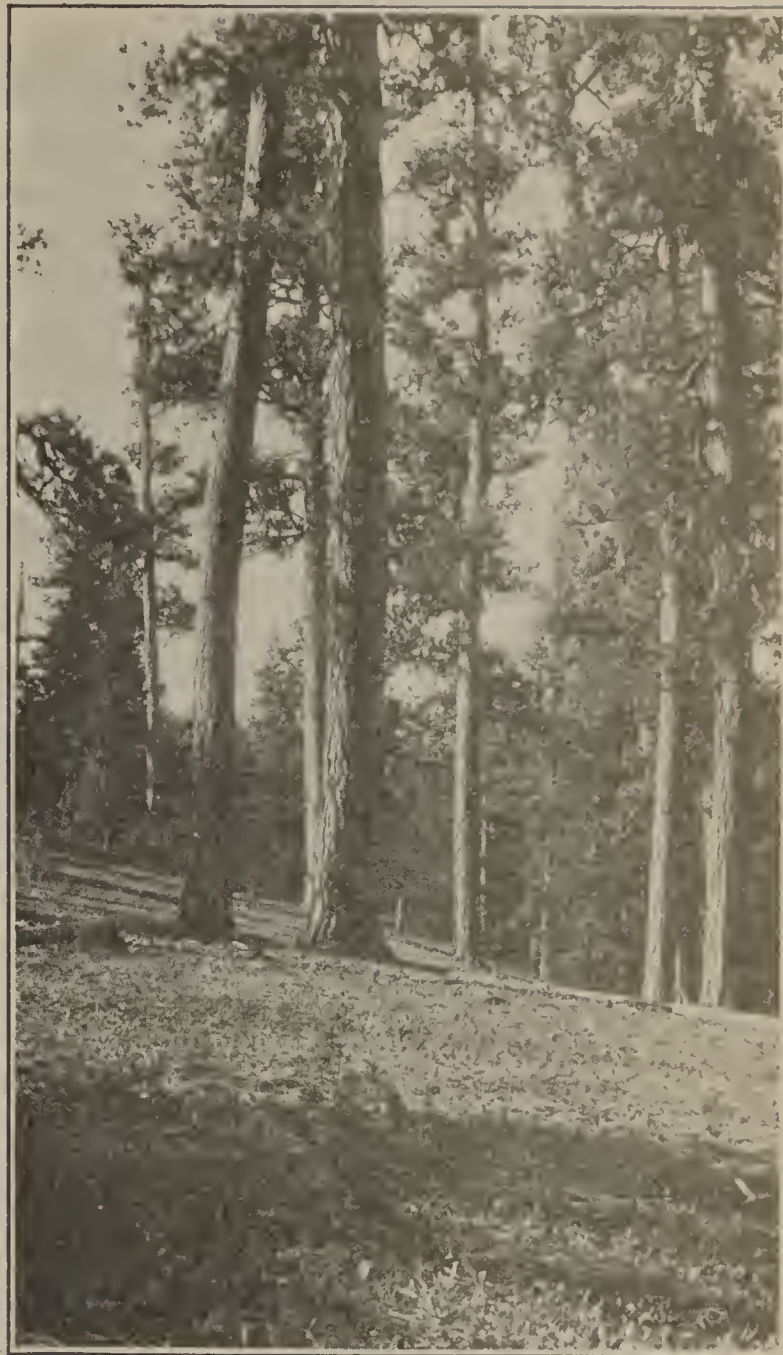
The western yellow pine is sound, largely mature, and of good quality, comparing very favorably with the better class of timber of this species now being cut by the mills of eastern Oregon. The trees will average about 4½ sixteen-foot logs in merchantable length, and will run about 5 logs per thousand feet log scale. It is estimated that the pine will yield between 25 and 30 per cent of shop and better lumber, and over 20 per cent of No. 2 common.

The timber of other species is of smaller size than yellow pine, and comparable in quality to the fir and larch being cut by the mills of eastern Oregon.





Typical of high quality yellow pine on the Malheur National Forest.



Typical pine stand on slopes of Silvies River near Bear Valley Ranger Station. Average quality of Government timber.

The moderate slopes, smooth surface, and freedom from brush shown in the above views is a prevalent condition over the entire tract.



On account of the small size of the trees and the occurrence of numerous knots, but very little high grade lumber can be secured from these species. The timber is most suitable for dimension stock, small timbers, ties, and inch lumber for ordinary building purposes.

#### **ADDITIONAL GOVERNMENT TIMBER.**

The entire timbered area tributary to Burns, as shown on the accompanying map, is estimated to have a stand of 6,725,000 M feet b. m. Of this the proposed railroad development north of Burns will tap a total of about 4 billion feet. The other units are very similar to the proposed sale unit in percentage of pine, stand per acre, quality, and logging conditions. Only short taplines from 3 to 10 miles long will be necessary to reach these units from the proposed trunk line. The Emigrant-Silver Creek watersheds with an estimated stand of 2,700,000 M feet will require a separate tap line from Burns.

#### **MANAGEMENT PLAN.**

It is the intention of the Forest Service to place the timber naturally tributary to Burns under a plan of management with the purpose of maintaining a continuous production and thereby prolonging indefinitely the life of the lumber industry in this region. It is tentatively estimated that this working circle, with its estimated stand of 6,725,000 M feet b. m., can be managed to produce a continuous yield of approximately 68 million feet annually. The stabilizing effect which this policy will have upon the industries of the community can readily be appreciated.

#### **ADJACENT PRIVATE TIMBER.**

Lying within the boundaries or adjacent to the proposed sale area there is approximately 210 million feet of privately owned timber, making a total operating unit of 1,100 million feet. It is understood that this private timber can be purchased at a reasonable price.

#### **LAND EXCHANGES.**

Recently enacted Federal laws authorize the exchange, when in the public interest, of privately owned lands within the exterior boundaries of the National Forests for equal values of Government land within the Forests or of National Forest timber. Exchanges under these laws will not be made when offered land is susceptible of agricultural development or is best suited for development by private enterprise. To be acceptable, offered lands must be chiefly valuable for forest production or watershed protection. Each offer to exchange private land for Government land or for Government timber is considered on its merits. The contract for this timber sale provides for the exclusion of timber, by mutual consent, for use in effecting exchanges.

### NECESSARY RAILROAD DEVELOPMENT.

The railroad development necessary in conjunction with the proposed lumbering operation is as follows:

1. A 30-mile extension from the Oregon Short Line at Crane to the mill site at Burns. Due to the unusually favorable topography and grading conditions, this line can be built at a very low cost. The estimated cost of grading, drainage, laying steel and ties, ballasting, engineering and ties, is placed at \$7,460 per mile, or a total of \$223,800. The right of way can be secured at a low cost. The maximum gradient on this line would be about 0.3 of 1 per cent.



Private timber in T. 15-30. Typical of private and Government stands on flats at the head of Bear Valley. The quality shown in this view is below the average for the private holdings. The unusually favorable logging conditions shown prevail on the private holdings and on much of the National Forest land in the unit.

In view of the large amount of tonnage from the local timber and agricultural resources that this railroad extension will reach, it will have an indefinite life as a common carrier. Considering the low cost of construction, maintenance, and operation, and the fact that the present road into Crane carries but little tonnage, the extension would obviously be a desirable undertaking for the Union Pacific System.

2. A 50-mile tap line from Burns to Seneca. The character of the route for this tap line will permit of the construction of a high-class road at a low cost per mile. The greater portion of the line would have less than a 1 per cent adverse grade for empty log cars. The heaviest grades would consist of about 6 miles of  $1\frac{1}{2}$  per cent grade against loaded cars of logs and about 3 miles with a 2 per cent grade against empty cars.



This line taps at least 4 billion feet of merchantable timber. The complete cost of this line, exclusive of steel and fastenings, is estimated at \$13,260 per mile. The contract requires that it be a common carrier, and considerable traffic other than logs should be secured.

3. Short main-line branches from 5 to 10 miles in length, leading from Seneca to timber. Conditions are ideal for cheap construction, operation, and maintenance of practically all branch lines and spurs used in the logging operations.

### LOGGING CONDITIONS AND LOGGING METHODS.

One of the most striking features to be considered in viewing the proposition from an operating standpoint is the easy logging conditions prevalent over practically all of the tract. Gentle topography predominates over all but very small portions of the area, underbrush is light, the ground surface is smooth and free from rock, and numerous streams with easy gradients to within short distances of the main divides make both railroading and skidding a comparatively simple problem. It is considered that the most feasible plan for logging this tract would involve the construction of numerous spurs and skidding with horses and tongs, horses and drag sleds, and caterpillar tractors. On the greater portion of the private lands high wheels can be used most profitably.

The logging season will vary from 8 to 10 months, depending upon the character of the winter season. It is believed that the snow conditions of winter will make sleigh and drag-sled operations practicable.

### MANUFACTURING.

Burns is considered to be the most logical place for the manufacturing plant. This town is the largest local settlement, is built on a very good site, has a more moderate climate than the higher valleys of the Silvies River, and has in addition many advantages favoring its selection as a permanent manufacturing center. Stands of approximately 7,000,000,000 feet b. m. of saw timber are tributary to this location. An excellent mill site is available on the Silvies River, about  $1\frac{1}{2}$  miles north of the town. Climatic conditions will permit operating a sawmill practically every month in the year.

## INVESTMENTS.

## LOGGING.

For the first year's operations, the estimated initial outlay in railroad, railroad and logging equipment, and improvements, but exclusive of the line from Crane to Burns, is as follows:

1. Railroad from Burns to Seneca, complete.....	\$980,000
2. Mainline from Seneca to timber, 11 miles, complete.....	100,000
3. Railroad spurs under rails.....	45,000
	<hr/>
	1,125,000

*Equipment.*

1. Railroad steel and fastenings.....	\$46,000
2. Locomotives.....	97,000
3. Cars.....	120,000
4. Loaders.....	20,000
5. Camps.....	37,500
6. Horses.....	15,000
7. Caterpillar tractors.....	35,000
8. Miscellaneous equipment.....	40,000
	<hr/>
	410,500
Grand total.....	<hr/>
	1,535,500

## MANUFACTURING.

For the manufacturing plant it is considered that the modern type of band mill with two head rigs and one or more resaws would be most efficient for the class of timber involved. It is estimated that such a plant operating on a double shift basis would give a total yearly cut of 60 million feet of lumber.

The planing mill should have a capacity of at least 90% of the cut of the rough mill.

A box factory is recognized as an essential adjunct to an operation in western yellow pine. This species is an excellent box material, the finished product ranking very high for many kinds of containers. Considering the percentage of lumber from this timber which will go into No. 3 common and poorer, the box factory should have a capacity of from 25 to 40 per cent of the cut of the main mill.

Yard space and climatic conditions are excellent for air-seasoning lumber. However, a battery of dry kilns is considered an essential investment.

The cost of the sawmill, exclusive of box factory and dwellings, is placed at \$525,000. With the downward tendency of equipment prices it is probable that both the mill and logging investments will be actually made at lower figures.

**PRODUCTION COSTS.****LOGGING.**

On the basis of present wage scales and supply costs, and assuming the railroad from Burns to Seneca as a part of the logging plant, the total cost of delivering logs to Burns, including depreciation (and exclusive of stumpage) is placed at \$10 per M feet lumber tally.

**MANUFACTURING, SHIPPING, AND SELLING.**

The estimated cost of manufacturing, shipping, and selling is \$10 per M feet lumber tally.

The above costs are for operating pine only. Should a considerable portion of the fir and larch be cut, the costs would be perceptibly lowered.

**MARKET.**

The major portion of the finished product will go into the general market east of the Rocky Mountains, common to the mills of eastern Oregon, via the Union Pacific gateway. Under a normal demand, this additional cut in the region would be readily absorbed in the above markets.

A good local market may be considered as assured with the agricultural development in Harney Valley which will take place upon the introduction of transportation and irrigation. This market, particularly during the first few years after the railroad extension is made, will absorb considerable quantities of fir and larch timbers, ties, and common boards.

**FREIGHT RATES.**

It is believed that the terminal rate to territory east of Ogden, now applying to the eastern Oregon group of mills, can be secured for the Burns shipping point.

**IMPORTANT FACTORS WHICH MAKE THIS PROPOSITION ATTRACTIVE.**

1. The purchaser of this unit will establish his operation in an undeveloped stand of pine timber greater than any to be found anywhere in the Northwest. Under Government management, the policy of sustained production assures the industry the opportunity to get practically a continuous supply of raw material.

2. The experience of the lumbering industry has shown that western yellow pine is a very desirable species from an operating viewpoint. It is an excellent wood to manufacture, and the finished products rank high in competition with other softwoods in the general market.



3. The pine timber in this sale is of very good quality and of desirable size to handle.

4. The cutting of other species than yellow pine will be optional with the purchaser.

5. The fire hazard in this type of timber is unusually low. The danger of loss of timber, with the consequent endangering of the investment in plant, common in other types, is negligible.

6. The stumpage price is considered reasonable. The operator in National Forest timber has no appreciable investment in stumpage and avoids the burden of carrying costs in interest and taxes.

7. The region opened up by the railroad offers rich opportunities for development of agriculture and other industries furnishing freight traffic.

#### GENERAL CONDITIONS OF SALE.

The stumpage alone is offered for sale, the title to the land being retained by the Government. Following the period of advertisement, the timber will be awarded to the highest acceptable bidder showing sufficient financial ability to fulfill the terms of the contract. No bids will be considered for less than \$2.75 per M feet for western yellow pine, or \$0.50 per M feet for other species removed at the option of the purchaser. The right to reject any or all bids is reserved.

The initial contract price will apply until April 1, 1928, at which time, and at three-year intervals thereafter, the Forest Service has the option of readjusting the rates to conform with the general stumpage values and current prices being received for similar timber. Basic information for readjustments is carefully prepared by experienced valuation engineers thoroughly familiar with the lumbering business. Full consideration is given to the necessity of allowing the operator a liberal margin for profit and risk. Timber will be paid for in advance installments of \$25,000 to \$50,000 each as cutting proceeds and on the basis of the Government log scale. The contract expires on November 30, 1945.

The purchaser is allowed until April 1, 1925, to begin actual logging operations on the unit. This gives time for preparatory construction and organizing the business. Cutting in the Government timber must begin not later than October 1, 1925.

The contract has been drawn up on the assumption that the privately owned timber in the logging unit will be cut as reached in building spurs into the Government timber. Most of it is so located that it should logically be cut during the first five years. The expectation is that the operator will cut annually from 30,000,000 to 56,000,000 feet of logs (33,000,000 to 62,000,000 feet of lumber), and the contract for the Government timber fixes limits on the rate of cutting by three-year periods on this basis.

The western yellow pine will be cut under a selection system, practically all mature trees being cut, and not to exceed 15 per cent by volume in trees 12 inches and over in diameter breast height being reserved.

Brush and débris will be piled and burned at the expense of the purchaser. This operation costs, in other sales in the region, from 25 to 35 cents per M feet of timber cut.

The contract stipulates that a common carrier railroad must be built from main line connection to Seneca.

As a guarantee of faithful performance of the contract, the purchaser is required to furnish a bond of \$50,000.

For more detailed conditions of sale, see form of contract, pages 12 to 19.

### **REQUIREMENTS PRELIMINARY TO AWARD.**

Before the timber is awarded and the contract submitted to the successful applicant for execution, he will be required to file evidence of financial standing as follows:

1. The purchaser will be required to show assets in hand of \$850,000, estimated to be about 30 per cent of the initial investment in fixed and working capital as shown by the appraisal. Such assets must be clear of liabilities, which include bonds, mortgages, or notes, but not stock subscribed or paid in. Assets may be in the form of cash, improvements, equipment, or, in the case of corporations, subscribed stock, the last not to exceed one-half of the amount required for a satisfactory financial showing. Stock subscriptions must be by solvent subscribers satisfactory to the approving officer and in the amount specified, whether the stock be subscribed at par or not. Assets equivalent to subscribed stock may be accepted in the case of firms, partnerships, limited corporations, or personal or family arrangements. These may include written promises or agreements to furnish stated amounts of money for the enterprise from persons found to have ample resources to make them good. Not less than one-half of the amount required for a satisfactory financial showing should be available in cash, improvements, or equipment before the timber is awarded, and satisfactory guaranties from subscribers should be furnished that any balance in subscribed stock or promises to furnish capital, making up the 30 per cent, will be paid in not later than the beginning of the cutting period.

2. Bond issues and other forms of indebtedness are thus restricted to a maximum of 70 per cent of the capital needed.

3. In any case, not less than 20 per cent of the fixed and working capital required must be furnished in some form by responsible men who will be actively identified with the management of the company as directors or executive officers.

4. The plan which will be followed in securing the remainder of the capital required, by sales of stock, bond issues, mortgages, etc., should also be set forth in the financial statement.

5. In the case of new companies, or those of unknown standing, a written statement satisfactory to the approving officer of the completed organization of the company will also be required. It must be accompanied by certified copies of all documents and corporate records showing the steps taken in completing the organization.

Maps may be inspected and further information obtained at the office of the District Forester, Forest Service, Portland, Oreg., or the Forest Supervisor, John Day, Oreg.



Prospective purchasers desiring to examine the tract, should first visit either of the above offices. John Day is most readily reached via the Union Pacific Railway to Baker, Oreg., and thence by the Sumpter Valley Railway to Prairie City and John Day.

Since the practicability of logging operations in National Forest timber may be questioned by those who have not had actual experience, it may be stated that the Forest Service has been selling stumpage for over ten years under contracts embodying the essential features of the one offered in this case. Those interested are invited to make inquiry of the numerous purchasers who are now cutting National Forest timber of the same type in eastern Oregon, California, Arizona, and other Western States. The names and addresses of such operators can be obtained from the District Forester.

The following form of advertisement is now appearing in numerous publications:

**890,000,000 FEET**

**NATIONAL FOREST TIMBER FOR SALE.**

**The First Unit of One of the Largest Undeveloped Tracts of Yellow Pine in the United States.**

**LOCATION AND AMOUNT.**—All the merchantable dead timber standing or down and all the live timber marked or designated for cutting on an area embracing about 67,400 acres in Twp. 15 S., Ranges 29, 30, and 31 E., Twp. 16 S., Ranges 29, 30, 31, and 32 E., and Twp. 17 S., Ranges 29, 30, and 31 E., W. M., Silvies River watershed, Malheur National Forest, Oregon, estimated to be 770,000,000 feet b. m., more or less, of western yellow pine and 120,000,000 feet b. m., more or less, of Douglas fir, western larch, white fir, lodgepole pine, and other species of timber. The cutting of other species than western yellow pine to be optional with the purchaser.

**STUMPAGE PRICES.**—Lowest rates considered, \$2.75 per M for western yellow pine and \$0.50 per M for other species. Rates to be readjusted April 1, 1928, and at three-year intervals thereafter.

**DEPOSIT.**—\$25,000 must be deposited with each bid to be applied on the purchase price, refunded, or retained in part as liquidated damages, according to conditions of sale.

**FINAL DATE FOR BIDS.**—Sealed bids will be received by the District Forester, Portland, Oregon, up to and including February 15, 1923.

The right to reject any and all bids reserved.

Before bids are submitted full information concerning the character of the timber, conditions of sale, deposits, and the submission of bids should be obtained from the District Forester, Portland, Oregon, or the Forest Supervisor, John Day, Oregon.

**FORM OF CONTRACT.**

The form of contract the purchaser will be required to execute is as follows:

**UNITED STATES DEPARTMENT OF AGRICULTURE,  
FOREST SERVICE.**

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**TIMBER SALE AGREEMENT.**

**Description of timber.—1.** .....,  
(I or we.)

a corporation organized and existing under the laws of the State of ....., hereby agree to purchase from an area of about 67,400 acres to be definitely designated on the ground by a Forest officer prior to cutting, in Twp. 15 South, Ranges 29, 30, and 31 East; Twp. 16 South, Ranges 29, 30, 31, and 32 East; Twp. 17 South, Ranges 29, 30, and 31 East, W. M., in the Silvies River watershed, as designated on the attached map, which is hereby made a part of this agreement, within the Malheur National Forest, at the rate or rates, and in strict conformity with all and singular the requirements and conditions hereinafter set forth, all the dead timber standing or down and all the live timber marked or designated for cutting by a Forest officer, merchantable as hereinafter defined for saw logs. The estimated amount to be cut under the methods of marking described in section 5 is 770,000,000 feet b. m. of western yellow pine, live and dead saw timber, more or less, and an unestimated amount of saw timber of Douglas fir, western larch, white fir, lodgepole pine, and other species. The cutting of other species than western yellow pine shall be optional with the purchaser.

**Payments.—2. (a)** ..... do hereby, in consideration of the sale of this timber to  
(I or we.)  
..... promise to pay to the Portland Branch, Federal Reserve Bank at Portland, Oregon  
(Me or us.) (United States depository), or such other depository or officer as shall hereafter be designated, to be placed to the credit of the United States, for the timber at the following rates:

For all timber cut prior to April 1, 1928, at the following rates:

\$..... per M feet b. m. for western yellow pine.

\$..... per M feet b. m. for all other species.

For all timber cut on or after April 1, 1928, and prior to April 1, 1931, at such rates as shall be designated by the Forester within 30 days preceding April 1, 1928.

For all timber cut on or after April 1, 1931, and prior to April 1, 1934, at such rates as shall be designated by the Forester within 30 days preceding April 1, 1931.

For all timber cut on or after April 1, 1934, and prior to April 1, 1937, at such rates as shall be designated by the Forester within 30 days preceding April 1, 1934.

For all timber cut on or after April 1, 1937, and prior to April 1, 1940, at such rates as shall be designated by the Forester within 30 days preceding April 1, 1937.

For all timber cut on or after April 1, 1940, and prior to April 1, 1943, at such rates as shall be designated by the Forester within 30 days preceding April 1, 1940.

And for all timber cut on or after April 1, 1943, at such rates as shall be designated by the Forester within 30 days preceding that date.

(b) The Forester shall reappraise, and, within 30 days before each of the foregoing dates, designate the value of each species in consideration of current operating conditions and markets in the eastern Oregon region, including the operation of the purchaser, such reappraisals to include the timber on the entire tract, and to be based upon an equitable margin for profit and risk to the purchaser under the operating conditions prevailing throughout the region.



(c) If any material cut under this agreement and merchantable under its terms is manufactured or sold by the purchaser in other forms than sawlogs, the Forester may upon the next reappraisal date establish a special stumpage rate for each class of material so manufactured or sold during the succeeding period, which rate, in accordance with the ratio per thousand board feet currently used by the Forest Service, shall be not less than the initial stumpage price fixed herein and shall allow the purchaser an equitable margin for profit and risk under current selling prices and costs of production in the region defined above.

(d) It is further agreed that the Secretary of Agriculture will, upon written application from the purchaser showing good and sufficient reasons therefor and specifically the existence of a serious emergency arising from changes in market conditions since the last reappraisal, at his option, when action of either character is necessary to relieve the purchaser from hardship, either—

(1) Redetermine and establish the stumpage rates and designate a date when the rates as redetermined shall be effective, which date shall be within six months of the date of application; or

(2) Grant an extension of time within which the respective amounts of timber specified in section 3 shall be removed, not to exceed the total period allowed for cutting all the timber.

Any stumpage rates redetermined upon application to the Secretary shall be determined in accordance with the methods and under the terms above set forth and shall apply only during the remainder of the three-year period then current, when the rates shall be regularly designated after reappraisal.

(e) In no event, however, shall the stumpage rates for products from material whose utilization is required by this agreement as established upon any date above named, or upon application from the purchaser, be less than those specified herein to be paid for timber cut prior to April 1, 1928.

(f) It is further agreed that at the date of any reappraisal of stumpage prices the Forester may require such modifications in the sections numbered 5, 11, 13, 14, 15, 17, 19, 22, 23, 30, and 31 in this agreement as are necessary, in his judgment, to protect the interests of the United States. Such modifications shall be limited to requirements contained in the then current timber sale contracts in eastern Oregon and shall be practicable under the existing equipment and organization of the purchaser. Any additional operating costs entailed by such modifications, as ascertained by the Forester, shall be taken into consideration as a factor in reappraisals.

(g) Payments shall be made in advance installments of not less than \$25,000 and not more than \$50,000 each when called for by the Forest officer in charge, except just before the completion of the sale or a period when cutting operations are to be suspended for at least three months, when the amount of the payment shall be designated in writing by the Forest Supervisor, credit being given for the sums, if any, heretofore deposited with the said United States depository or officer in connection with this sale.

3. The cutting and removal of timber from the tract included in this agreement, or from the adjacent private lands within the same operating unit, shall begin not later than April 1, 1925: *Provided*, That the cutting and removal of timber under this agreement shall begin not later than October 1, 1925; and, unless an extension of time is granted, all timber shall be cut and removed and the requirements of this agreement satisfied on or before November 30, 1945.

Unless such amounts are changed in writing by the District Forester, at least 60,000,000 feet b. m., and not more than 110,000,000 feet b. m., shall be cut prior to April 1, 1928; at least 120,000,000 feet b. m., and not more than 220,000,000 feet b. m., shall be cut prior to April 1, 1931; and not less than 100,000,000 feet b. m., and not more than 175,000,000 feet b. m., shall be cut during each three-year period thereafter until all the timber designated for cutting on the sale area is cut and removed, or until the agreement has expired.

4. The title to all timber included in this agreement shall remain in the United States until it has been paid for, and scaled, measured, or counted as herein provided.

Timber upon valid claims and all timber to which there exists valid claim under contract with the Forest Service is exempted from this sale.

5. Live timber shall be marked for cutting as follows: Not less than 85 per cent by volume of the total stand of merchantable live western yellow pine timber in trees 12 inches and over in diameter at a point  $4\frac{1}{2}$  feet above the ground on the areas designated for cutting by the Forest officers shall be marked for cutting by blazing below stump height and by stamping "U. S." on the blaze, or by such other method as may be found to be most practicable by the Forest officer in charge. Merchantable dead timber on such designated areas shall be cut whether marked or not marked. Timber of other species than western yellow pine, to be cut at the option of the purchaser, shall be marked or designated for cutting in the manner considered most practicable by the Forest officer in charge.

Any tree which in the judgment of the Forest officer contains one or more logs merchantable as hereinafter defined, and having a net total scale of 25 per cent or more of the total volume of the tree, shall be considered merchantable under the terms of this agreement and may be marked or designated for cutting by the Forest officer.

6. **Logging.**—As far as may be deemed necessary for the protection of National Forest interests, the plan of logging operations on the respective portions of the sale area shall be approved by the Forest officer in charge. When operations are begun on any natural logging area, the cutting on that area shall be fully completed to the satisfaction of the Forest officer in charge before cutting may begin on other areas, unless such cutting is authorized in writing with the requirement that cutting shall be completed on the area left unfinished as soon as practicable. After decision in writing by the Forest officer in charge that the purchaser has complied satisfactorily with the contract requirements as to specified areas, the purchaser shall not be required to do additional work on such areas.

7. Any method of logging other than by means of horses and caterpillar tractors may be employed only with the advance approval in writing of the Forest officer approving this agreement and under such conditions and restrictions as he may require.

8. All and only marked or designated live trees shall be cut. No timber shall be cut until paid for, nor removed from the place or places agreed upon for scaling until scaled, measured, or counted by a Forest officer.

9. No unnecessary damage shall be done to young growth or to trees left standing, and no trees will be left lodged in the process of felling. Unmarked or undesignated trees which are badly damaged in logging shall be cut if required by the Forest officer in charge.

10. Unmarked or undesignated live trees which are cut, or injured through carelessness, and marked or designated trees left uncut, shall be paid for at double the current price for the class of material which they contain, fixed in accordance with the terms of this agreement.

Timber wasted in tops or stumps, marked or designated timber broken by careless felling, and any timber merchantable according to the terms of this agreement, which is cut and not removed from any portion of the cutting area when operations on such portion are completed, or before this agreement expires or is otherwise terminated, shall be paid for at the current price for such material.

The amounts herein specified shall be regarded as liquidated damages and may be waived in the discretion of the Forest officer in charge in accidental or exceptional cases which involve small amounts of material. Any timber remaining on the sale area at the expiration or termination of this agreement, for which payment as herein specified has been made to the United States, may be removed within six months from such date of expiration.

11. All cutting shall be done with a saw when practicable; stumps shall be cut so as to cause the least practicable waste, and not higher than 18 inches on the side adjacent to the highest ground, except in unusual cases when, in the discretion of the Forest officer in charge, this height is not considered practicable; all trees shall be utilized to as low a diameter in the tops as practicable and to a minimum diameter of 7 inches when merchantable in the judgment of the Forest



officer in charge. The log lengths shall be varied so as to secure the greatest possible utilization of merchantable material.

12. **Scaling and merchantability.**—Material shall be piled or skidded for scaling, measurement, or count if required by the Forest officer in charge and in such manner as he shall direct.

Sawlogs shall be scaled by the Scribner Decimal C log rule, at the small end on the average diameter inside bark taken to the nearest inch.

Logging operations shall be so conducted as to permit scaling to be done economically, and timber or logs from private or State land shall not be mixed at the point of scaling with timber or logs from Government land.

On request, copies or abstracts of the scale reports will be furnished to the purchaser after they have been approved by the Supervisor.

13. The maximum scaling length of sawlogs shall be 16 feet; greater lengths will be scaled as two or more logs. Upon all logs 4 inches shall be allowed for trimming. Logs overrunning the specified trimming allowance shall be scaled not to exceed the next foot in length.

14. All western yellow pine logs are merchantable under the terms of this agreement which are not less than 10 feet long, at least 7 inches in diameter inside bark at the small end, and after deductions for visible indications of defect scale  $33\frac{1}{3}$  per cent of their gross scale; and logs of other species not less than 12 feet long, 7 inches in diameter inside bark at small end, and scaling 50 per cent of their gross scale.

Material unmerchantable on account of defects may be removed without charge in the discretion of the District Forester.

15. **Brush disposal.**—Slash shall be disposed of as follows: The tops of all trees felled, whether merchantable or unmerchantable, shall be lopped and all brush and slash piled compactly as required by the Forest officer in charge. The brush piles shall be so placed that they may be burned with the least possible damage to standing trees and young growth.

16. As far as practicable all branches of logging shall keep pace with one another, and in no instance shall brush piling be allowed to fall behind skidding operations more than thirty days, except when in the judgment of the Forest officer in charge snow conditions make proper piling impracticable.

17. **Fire protection.**—During the time that this agreement remains in force the purchaser shall independently do all in his power to prevent and suppress forest fires on the sale area and in its vicinity, and shall require his employees, contractors, and employees of contractors to do likewise. Unless prevented by circumstances over which he has no control, the purchaser shall place his employees, contractors, and employees of contractors at the disposal of any authorized Forest officer for the purpose of fighting forest fires, with the understanding that unless the fire-fighting services are rendered on the area embraced in this agreement or on adjacent areas within 1 mile of the exterior boundaries of the sale area, payment for such services shall be made at rates to be determined by the Forest officer in charge, which rates shall not be less than the current rates of pay prevailing in the said National Forest for services of a similar character: *Provided*, That the maximum expenditure for fire fighting without remuneration in any one calendar year, at rates of pay determined as above, shall not exceed \$21,000, including the furnishing of special trains or other special service, and further provided, that if the purchaser, his employees, contractors, or employees of contractors are directly or indirectly responsible for the origin of the fire, no payment shall be made for services so rendered, nor shall the cost of such services be included in determining said maximum expenditure for any calendar year.

It is further agreed that except in serious emergencies as determined by the Forest Supervisor the purchaser shall not be required to furnish more than 100 men for fighting fires outside of the area above specified, and that any employees furnished shall be relieved from fire fighting on such outside areas as soon as it is practicable for the Forest Supervisor to obtain other labor adequate for the protection of the National Forest.

18. **Occupancy and improvements.**—The purchaser is authorized to build, on National Forest land, sawmills, camps, railroads, roads, and other improvements necessary in the logging or the manufacturing of the timber included in this agreement: *Provided*, That all such structures and improvements shall be located and operated subject to such regulation by the Forest officer in charge as may be necessary for the protection of National Forest interests. The continuance or operation of such improvements on National Forest land after this agreement has terminated shall be subject to authorization by permit or easement under United States laws, and unless such authorization is secured all improvements not removed shall become the property of the United States at the expiration of six months from the termination of this agreement.

19. All merchantable western yellow pine timber used in the construction of buildings, roads, and other structures, necessary in connection with the cutting and removal of the timber covered by this agreement, shall be paid for at the current rates for such material under this agreement. Merchantable material of other species, cull material, and unmerchantable tops of any species may be used for such purposes without charge and shall be left in place where used.

20. Logging camps, mills, stables, and other structures, and the ground in their vicinity, shall be kept in a clean, sanitary condition, and rubbish shall be removed and burned or buried. When camps or other establishments are moved from one location to another or abandoned, all débris shall be burned or otherwise disposed of as the Forest officer in charge shall direct.

21. All telephone lines and fences crossing the sale area shall be protected as far as possible in logging operations, and if injured shall be repaired immediately by the purchaser; all roads and trails in the National Forests within the sale area or used by the purchaser in connection with the sale shall be kept free from obstruction from logs, brush, or débris, resulting from his operations, and if damaged or injured beyond ordinary wear and tear shall be repaired by him as the Forest officer shall require.

22. **Brush or slash burning.**—The purchaser agrees to furnish a sufficient number of men, not to exceed 100, without cost to the Government, at such times as the Forest officer in charge shall specify, to be placed under his direction and control to burn the brush and débris resulting from this sale: *Provided*, That the purchaser shall not be held responsible for damage resulting from fires started to dispose of brush under the supervision of the Forest officer in charge if all precautions required by him were taken.

If required by the Forest Supervisor, instead of furnishing men for brush-burning work, and in addition to making advance payments as herein provided for the stumpage value of the timber covered by this agreement, we further promise and agree to deposit in the above-designated depository, when called for by the Forest Supervisor, such sum or sums, not to exceed 6 cents per thousand feet b. m., for the total cut as determined by the Forest officer in charge, as may be necessary in his judgment to cover the cost to the United States of burning such of the brush and other débris on the sale area as may be required by the Forest officer in charge, it being understood and agreed that such sum or sums shall be paid out in accordance with the Fiscal Regulations of the Department of Agriculture for the payment of the cost of such disposal, and that any excess over such costs shall be refunded to the depositor. It is further understood and agreed that all labor, transportation and supplies shall be hired or procured by the Forest Supervisor, and that the work shall be done under the direction of a Forest officer. The purchaser hereby agrees to furnish board and lodging, when requested by the Forest Supervisor, to Forest Service employees engaged in brush disposal under the provisions of this agreement, for which payment shall be made at the prevailing rates charged his own employees: *Provided*, That his cook-house and bunk-houses are open at the time the brush disposal work is being done.

23. **Cutting of snags and diseased trees.**—In addition to such living and dead trees as may be cut under the provisions of section 30 all marked living diseased trees and all standing unmerchantable dead trees over 20 feet in height on the sale area shall be cut: *Provided*, That the number of living diseased trees so cut shall not exceed an average of two per acre on the sale area as a whole.



24. **Long-butting larch.**—Western larch may be long butted sufficiently to eliminate material unmerchantable in the judgment of the Forest officer in charge. If required by the Forest officer in charge, cuts shall be made in lengths of 7 feet.

25. **Wood used as fuel.**—Wood taken from tops or unmerchantable timber for use as fuel in connection with logging operations shall be allowed free of charge.

26. **Definition of "brush."**—The term "brush" as used in this agreement means all slash and debris resulting from logging operations, including stems, limbs, and parts thereof not exceeding 4 inches in diameter.

27. **Suspension of logging when fire danger excessive.**—Whenever in the judgment of the Forest Supervisor climatic conditions are such as to make the danger from forest fires excessive, the purchaser shall cease logging operations on the sale area after five days' notice from the Forest Supervisor and shall suspend such operations until released by further notice: *Provided, however,* That logging operations shall not be so suspended for more than 30 days in any one calendar year.

28. **Transportation on logging trains.**—Officers of the Forest Service, fire fighters, and other regular and temporary employees shall be transported free of charge over logging roads operated in connection with this sale not common carriers, and shall be permitted to ride upon logging trains and engines or to operate speeders when traveling upon official business. Forest officers and other employees riding on logging trains, engines, or speeders shall do so at their own risk, and the owner of the railroad expressly reserves the right to enter into an agreement with such persons before entering upon said trains or engines, or before operating a speeder, releasing the said owner from liability for any injury sustained by them in riding on said trains, engines, or speeders, arising from any cause whatsoever. In emergencies arising from forest fires special trains shall be furnished to officers and employees of the Forest Service.

29. **Burning of refuse.**—During the period from May 1 to October 1 of each year no refuse, brush, slash, or debris shall be burned without the written consent of the Forest officer in charge.

30. **Clearing rights of way.**—Whenever necessary in the judgment of the Forest officer in charge the purchaser shall clear and keep clear the railroad rights of way by cutting all dead trees and brush and by burning all inflammable material for a distance of not to exceed 100 feet on each side of the center of main and spur tracks in such manner and at such times as may be designated by the Forest officer in charge. During the months of May to September, inclusive, the purchaser may be required, in the discretion of the Forest Supervisor, to patrol all railroad tracks after the passage of each locomotive.

31. **Equipment of locomotives and donkeys.**—During the period from May 1 to October 1 of each year either oil shall be used exclusively as fuel in locomotives and other steam-power engines, or such engines shall be equipped with adequate spark arresters kept in constant use and repair and satisfactory to the Forest officer in charge. All such engines shall be equipped with a connected steam force pump of not less than 1-inch discharge, 100 feet of serviceable fire hose, 6 large pails, 6 shovels, 6 axes, and a constant supply of not less than the equivalent of 12 barrels of water. This equipment shall be suitable for fire-fighting purposes, shall be kept in serviceable condition, and at all times readily available for fighting fire.

32. **Use of wood in oil burners.**—If wood is used to start or to maintain overnight fire in any oil-burning locomotive, that locomotive shall not be moved until it is under steam with oil as fuel, and the quantity of wood used shall be kept to the minimum necessary for the purpose.

33. **Representative of purchaser in camp.**—At all times when logging operations are in progress the purchaser shall have at the main camp for his employees working on the sale area a representative who shall be authorized to receive, on behalf of the purchaser, any or all notices and instructions in regard to work under this agreement given by the Forest officer in charge, and to take such action thereon as is required by the terms of this agreement.

34. **Sale of other products from the same area.**—The United States reserves the right to sell other products than saw timber from the sale area during the life of this agreement: *Provided,* That the removal of such material will not in the judgment of the Forest officer in charge interfere with the operations of the purchaser.

35. **Sale of naval products.**—The right to extract naval stores from any of the timber included in this agreement is reserved by the United States. Naval store rights may be leased by the United States during the contract period: *Provided*, That operations under such leases will not, in the judgment of the Forest officer in charge, interfere with the operations of the purchaser and that any lease made by the United States shall not permit the boxing of timber or the deterioration of the lumber values of the trees.

36. **Land exchanges.** At any time prior to the date fixed for completing the cutting and removal of the timber covered by this agreement, any of said timber may, by mutual agreement expressed in writing, be eliminated from the sale, in order that it may be given by the United States in exchange for privately owned land or land and timber in accordance with any law authorizing such exchange.

37. **Marketing of products.**—The purchaser further agrees, as a consideration under this agreement, that he will not sell, pool, or otherwise dispose of any products manufactured from the timber included in this sale in combination or cooperation with other manufacturers of similar products, or otherwise, by or through methods of marketing such products or marketing organizations which are found by the Secretary of Agriculture to constitute a substantial control of the supply of such products sufficient in extent and of such a nature as to be injurious to the interests of the public; that upon such finding he will desist from such disposition of such products, and that failure so to desist will constitute sufficient cause for the termination of this agreement: *Provided*, That no finding will be made hereunder by the Secretary of Agriculture until the purchaser has had notice and an opportunity to be heard on the matters involved: *And provided further*, That the agreement shall not be terminated hereunder in less than sixty (60) days from the date of such finding.

38. It is further agreed, as a part of the consideration of this agreement, that a common carrier railroad for freight and passengers, in accordance with the laws of the State of Oregon, shall be constructed from main line connection to Seneca.

39. Complaints by the purchaser arising from any action taken by a Forest officer under the terms of this agreement shall not be considered unless made in writing to the Forest Supervisor having jurisdiction, within thirty (30) days of the alleged unsatisfactory action. The decision of the Secretary of Agriculture shall be final in the interpretation of the regulations and provisions governing the sale, cutting, and removal of the timber covered by this agreement.

40. All operations on the sale area including the removal of scaled timber may be suspended by the Forest officer in charge, in writing, if the conditions and requirements contained in this agreement are disregarded; and failure to comply with any one of said conditions and requirements, if persisted in, shall be sufficient cause for the termination of this agreement: *Provided*, That the Forester may, upon reconsideration of the conditions existing at the date of sale and in accordance with which the terms of this agreement were fixed, and with the consent of the purchaser, terminate this agreement, but in the event of such termination the purchaser shall be liable for any damages sustained by the United States arising from the purchaser's operations hereunder.

41. All the books pertaining to the purchaser's logging operation and milling business shall be open to inspection at any time by a Forest officer authorized by the District Forester to make such inspection with the understanding that the information obtained shall be regarded as confidential.

42. The term "officer in charge," wherever used in this agreement, signifies the officer of the Forest Service who shall be designated by the proper Supervisor or by the District Forester to supervise the timber operations in this sale.

43. No Member of or Delegate to Congress, or Resident Commissioner, after his election or appointment, and either before or after he has qualified, and during his continuance in office, shall be admitted to any share or part of this contract or agreement, or to any benefit to arise thereupon. Nothing, however, herein contained shall be construed to extend to any incorporated company, where such contract or agreement is made for the general benefit of such incorporation or company. (Section 3741, Revised Statutes, and sections 114-116, act of March 4, 1909.)



44. This agreement shall not be assigned in whole or in part.

45. The conditions of the sale are completely set forth in this agreement, and none of its terms can be varied or modified except in writing by the Forest officer approving the agreement or his successor or superior officer, and in accordance with the regulations of the Secretary of Agriculture. No other Forest officer has been or will be given authority for this purpose.

46. And as a further guaranty of a faithful performance of the conditions of this agreement ..... deliver herewith a bond in the sum of \$50,000, and do further agree that all moneys  
(I or we)  
paid under this agreement shall, upon failure on ..... part to fulfill all and singular the  
(My or our)  
conditions and requirements herein set forth, or made a part hereof, be retained by the United States to be applied as far as may be to the satisfaction of ..... obligations assumed here-  
(My or our)  
under. .... do further agree that should the sureties on the bond delivered herewith or  
(I or we)  
on any bond delivered hereafter in connection with this sale become unsatisfactory to the officer approving this agreement, ..... will within thirty days of receipt of demand furnish a new  
(I or we)  
bond with sureties solvent and satisfactory to the approving officer.

Signed in duplicate this ..... day of ....., 1922.

(Corporate seal, if corporation).

.....  
(Signature of purchaser.)

.....  
(Signature of purchaser.)

.....  
(Title.)

Approved at Portland, Oreg., under the above conditions, ....., 1922..

.....  
(Signature of approving officer.)

*District Forester.*

Witnesses:

.....

.....

### THE HARNEY VALLEY REGION.

The following information in regard to the territory which will be developed by the prospective railroad is furnished and vouched for by the president of the Burns Chamber of Commerce and other responsible citizens:

The northern portion of Harney, southern Grant, and a portion of Crook County, an area of more than 10,000 square miles—greater than the combined area of the States of Rhode Island, Delaware, and Connecticut, with the District of Columbia added; greater than either New Jersey, Massachusetts, New Hampshire, or Vermont—will be directly tributary to a railroad from Crane, Oreg., through Burns to Bear Valley.

The agricultural possibilities of this region are very great, but to-day and for the past 50 years its resources are devoted exclusively to the production of cattle, sheep, and horses. It has justly

earned the title of the "meat platter" of Oregon. This territory brought under the plow will mean the passing of the last frontier in the United States.

The Union Pacific, when it controlled the Southern and Central Pacific Railroads, outlined a program for the development of central Oregon and constructed a railroad up the Deschutes River to Bend and up the Malheur River to Crane, but with the dissolution of these lines in 1913 construction stopped at these points. Both lines had reached the edge of the great plateau that makes up the central Oregon empire.

The vast agricultural possibilities of this region can not be developed without the aid of transportation to markets. Those interested have begged for transportation for years but have met with the answer "develop the tonnage and we will bring a railroad to it," and when the prospective settler or investor has been approached he has said "Why grow 60 bushels of wheat or 25 tons of sugar beets to the acre when you have no way of getting it to market?" So it is apparent that the key to the development is transportation.

#### AGRICULTURE.

Directly tributary to the railroad mentioned there are several large fertile valleys. In Grant County the John Day Valley for a distance of 60 miles will be a heavy contributor to traffic at the end of the line in Bear Valley. In Harney County proper such a line would traverse Harney Valley, containing 500,000 acres, and would bring to its lines the products of the valley of the Donder and Blitzen, comprising 140,000 acres, and Silver Creek Valley of 40,000 acres. In addition there are numerous smaller valleys and settlements that in the aggregate would bring under cultivation many thousands of acres.

Agricultural pursuits in this region are not generally successful without the aid of irrigation. To this end several notable irrigation projects, under irrigation district laws of the State, are in various stages of development, namely:

**Harney Valley irrigation district:** 83,000 acres. Extends from Burns or the northern portion of Harney Valley to Malheur Lake. Of this area 63,000 acres are now partially irrigated under the flood system that utilizes the spring run-off. Irrigation plan: Store the waters of Silvies River to extent of 140,000 acre-feet, and develop 63,000 acres now partially irrigated as first unit. Surplus waters to bring in new lands under its system will probably increase the irrigated area to 100,000 acres. Estimated cost of dams, distributing system, lands inundated, rights of way, etc., \$2,200,000. Bonds in sum of \$2,200,000 have been voted and plans approved by the State engineer.

**Blitzen River reclamation district:** 50,000 acres. South of Malheur Lake in the Blitzen River Valley, 34,650 acres have been reclaimed from swamp by drainage and it is now proposed to complete reclamation by building a storage reservoir on Blitzen River and to regulate irrigation of this 34,650 acres. Plans have been prepared and approved and bonds in the sum of \$1,970,000 have been authorized.

**Silver Creek irrigation district:** Silver Creek Valley, 30 miles west from Burns, contains in all about 37,000 acres. Of this area some 4,000 acres are well irrigated under the natural flood conditions from the flow of Silver Creek. Plan: Store waters of Silver Creek and develop 16,000 acres of choicest land as fruit unit. Plans have been prepared and approved by the State engineer. District bonds have been voted, legally approved and provided for in the sum of \$600,000 to cover the estimated cost of the project of \$485,000 and \$115,000 for the payment of the interest for the first four years. These bonds will be issued and placed on the market this fall, as it is desired to complete the construction work next year so that the system may be fully available for the season of 1924.

#### GENERAL CONDITIONS.

These three projects lie between the 4,100 and 4,200 foot level. The soil is generally of an alluvial deposit or silt brought down from the surrounding mountains, though there is a percentage of volcanic ash. These soils are very rich, comparatively little waste or alkaline lands.



## CROPS.

At present these lands are chiefly used for the production of native grass-hay, consisting of timothy, blue joint, red top, native clover, wild vetch, etc. Average production, one ton of cured hay per acre. The total annual production follows:

	Tons.
Silvies River (Harney Valley irrigation district).....	60,000
Blitzen River (Blitzen River reclamation district).....	35,000
Silver Creek (Silver Creek irrigation district).....	18,000

Owing to the lack of market, grain production has been limited to local consumption. The Burns Milling Company ground 2,400 barrels of flour from the 1921 crop of wheat, and this is a fair annual average.

Climatic and soil conditions are ideal for the production of forage crops and root plants, and with transportation, production of grain and food cereals will become an important factor. Extensive tests have been made by the Oregon Experimental Station, Harney Branch, six miles east from Burns, and these tests with the actual experience of farmers prove that the following yields may be had from irrigated lands:

## PER ACRE.

Wheat.....	bushels..	50 to 80
Oats.....	do....	50 to 130
Barley.....	do....	50 to 105
Sugar beets.....	tons..	2½ to 10
Mangle beets.....		
Sunflower.....	tons..	25 to 54
Alfalfa, 3½ to 7.35, 2 cuttings.		
Potatoes, from failure to 205 bushels.		

Fruit is an uncertain crop and will not be produced in a commercial way. Gardens do exceptionally well, and tomatoes, sweet corn, cucumbers, squash, and other garden vegetables are raised annually. Killing frosts seldom occur between May 15 and September 15, and frost is not here a controlling factor in the production of ordinary crops.

In a bearing on freight and passenger conditions on the Oregon Short Line—branch line from Ontario to Crane—the Public Service Commission of Oregon made the following finding in its decision of March 28, 1922:

“For some reason not disclosed by the record in the construction of these branch-line railroads consisting of 165 miles of standard road construction, Ontario to Crane and Brogan, no attempt was made to secure the vast tonnage that would be afforded by the construction of a thirty-mile line of railroad from Crane to Burns, over practically a water level grade. Such construction would be the means of development of one of the largest and most promising undeveloped territories in the United States. Harney Valley alone is 550,000 acres in extent, 450,000 acres of which is suitable for agriculture and stock growing. Thousands of acres are now in natural meadows which afford feed for thousands of cattle, horses, and sheep. The record shows that 200,000 acres of the valley are suitable for grain growing, which is only awaiting adequate transportation facilities to be brought into production.”

Freight handled on the Crane Branch, practically all handled at Crane, is as follows:

	1920.	1921.
November.....	tons.. 3,837	2,684
December.....	do.... 2,860	2,140

The decrease noted for 1921 can be attributed to the increase in freight rates on live stock, resulting in much of our stock being driven to California and other distant markets.

The agricultural future of this country lies in dairy products and diversified farming, although stock feeding and meat production will always remain an important factor.

Special attention is invited to the advantages Harney County offers for the production of sugar beets. Extensive tests prove that our soil and climate will produce a beet that is large in size, containing more than the average saccharine matter, and that the per acre tonnage is not to be exceeded anywhere. However, a cooperative movement is required that will assure a sufficient acreage to justify a local refinery.

#### VALUES.

The average value of irrigated lands in Harney Valley is between \$40 and \$50 per acre. These same lands with an additional investment of \$30 per acre to control the flood waters so as to employ proper methods of irrigation will make these lands worth from \$100 to \$150 per acre.

#### TAXES.

Harney County is not bonded for any purpose and the local government is economically administered. Assessments are about sixty per cent of cash values, and our tax rate is one of the lowest in the State.

#### JOHN DAY VALLEY.

A railroad to Bear Valley would serve a large portion of the famous John Day Valley, one of the most fertile spots in the West. This valley lies at an elevation of 3,000 feet, a veritable gem, protected by the Blue Mountains. Its production is unlimited and the quality and flavor of its fruits are unsurpassed. Without transportation the valley is now devoted to raising thousands of tons of alfalfa and other hay, and the production of mutton and beef. With a standard gauge rail road within fifteen miles of that valley it will in a short time contribute heavily of the higher priced agricultural and horticultural products. This valley is now sending its live stock to market from many points, notably Prineville, Shaniko, Condon, Pendleton, Heppner, and Baker. A large portion of all shipments and all live stock for eastern markets would probably be shipped from Bear Valley.

#### THE TOWN OF BURNS, OREG.

Burns, 40 years old, county seat of Harney County, is located on Silvies River in the north-western part of the great Harney Valley, 157 miles from the main track of the Oregon Short Line at Ontario; it affords splendid and natural millsites; it has a population of 1,022; a public library; two banks with footings aggregating more than \$1,200,000; high standard public and county high schools; a United States land office; several denominational churches and fraternal organizations. The Sisters of St. Joseph operate a strictly modern hospital.





